

J. D. H., 1 macropterous female under willow bark; Boskydell, Illinois, October 22, 1908, L. M. Smith, from branch of white oak, 1 brachypterous male; Mahomet, Illinois, July 27, 1908, J. D. H., under bark of rotting willow branch, 1 macropterous female, 4 brachypterous females, and 3 brachypterous males; Murphysboro, Illinois, November 6, 1908, L. M. Smith, from branch of bur oak, 1 macropterous male; St. Joseph, Illinois, May 25, 1913, C. A. Hart, from branch of oak, 1 macropterous female and 3 brachypterous females. (One brachypterous male was taken under apple bark at Vienna, Virginia, November 7, 1913, by R. A. Cushman.)

The closest described North American relative of this species is *T. beachi* Hinds, which differs conspicuously in having the tube "fully as long as the head."

I take pleasure in dedicating this splendid species to Dr. H. Karny, of Vienna, Austria, in recognition of his work on this order of insects. He has compared it with *T. ulmi* (Fabricius) and found it distinct.

A REVISION OF THE BRACONID GENUS UROSIGALPHUS

(Hymenoptera, Braconidae)

By J. C. CRAWFORD

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| 1. Marginal cell closed | 2 |
| Marginal cell open, the radius failing | 11 |
| 2. Vertex between ocelli elevated into a pyramidal lobe | 3 |
| Vertex between ocelli not elevated into a pyramidal lobe | 5 |
| 3. Abdomen at apex with two long sharply pointed spines; antennæ 14-jointed;
length about 3.5 mm. <i>anthomomi</i> Cwfd. | |
| Abdomen at apex either simple or with two blunt tubercles; size larger 5.5
mm. or more | 4 |
| 4. Larger 7 mm. more robust; abdomen at apex in female without tubercles,
with tubercles in male; antennæ 16-jointed <i>armatus</i> Ashm. | |
| Smaller about 6 mm. more slender; abdomen at apex in female with tuber-
cles; antennæ 17-jointed <i>barberi</i> , n. sp. | |
| 5. Scutellum posteriorly not strongly elevated | 6 |
| Scutellum posteriorly strongly elevated, the elevation sharply pointed | 9 |
| 6. Smaller 2.5 mm.; cheeks almost impunctate, punctures of head and thorax
small sparse; antennæ 16-jointed <i>hubbardi</i> , n. sp. | |
| Larger 3.5 mm. or more; cheeks distinctly punctured, punctures of head
and thorax large; antennæ in all known forms 15-jointed | 7 |

7. Legs black, punctures of the face rather small and separated by about a puncture width *nigripes*, n. sp.
 Legs red, punctures of the face close almost rugoso-punctate 8
8. Face rugoso-punctate, clypeus punctured *robustus* Ashm.
 Face with the punctures distinctly separated, clypeus medially smooth,
punctifrons, n. sp.
9. Abdomen in both sexes simple at apex *arizonensis*, n. sp.
 Abdomen with two tubercles at apex in both sexes 10
10. Mesopleuræ at lower edge closely rugoso-punctate, medially impunctate,
bruchi Cwfd.
 Mesopleuræ at lower edges sparsely punctured, medially punctate,
bruchivorus, n. sp.
11. Clypeus punctured only at base, extremely transverse, the emarginate anterior margin about twice as long as height of clypeus 12
 Clypeus not twice as broad as high, punctured all over *schwarzi* Cwfd.
12. Abdomen at apex with two tubercles *femoratus*, n. sp.
 Abdomen at apex without tubercles *neomexicanus*, n. sp.

Urosigalphus hubbardi, new species.

Male: Length, 2.5 mm. Black, the legs reddish brown, hind legs darker; antennæ 16-jointed, the face very finely and sparsely punctured, the vertex and post-vertex practically impunctate, middle lobe of mesoscutum rather coarsely punctured, at rear rugulose; lateral lobes more finely and sparsely punctured; mesopleuræ, except near margin, impunctate, lower margin closely, coarsely punctured; wings subhyaline, the stigma brown, darker on the costal margin, the veins light brown; abdomen distinctly longitudinally striated, punctate between the striæ.

Type locality, Chiricahua Mountains, Arizona.

One specimen labeled "31.5 H. G. Hubbard Collector."

Type specimen, Cat. No. 18228, U. S. Nat. Mus.

Urosigalphus barberi, new species.

Female: Length about 6 mm., ovipositor about 5 mm. Black, legs, including coxæ, red, the hind tibiæ brown, their tarsi darker; face, including clypeus, closely, coarsely punctured; top of head rugoso-punctate; antennæ 17-jointed, mesoscutum rather finely and sparsely punctured, scutellum with somewhat larger punctures, separated at base from mesoscutum by a row of wide foveæ, mesopleuræ with the lower anterior edge rugose and punctate between the rugæ; the lower margin finely punctured, posterior margin with a row of pits, medial portion impunctate; wings somewhat dusky, the stigma dark brown, veins lighter brown;

abdomen coarsely striate-punctate, tubercles at apex of abdomen small, blunt.

Described from one female from Las Vegas Hot Springs, New Mexico, with the date "10 . 8" collected by Barber and Schwarz.

Type specimen, Cat. No. 18229, U. S. Nat. Mus.

***Urosigalphus nigripes*, new species.**

Female: Length about 4 mm. Black, the legs dark brown, posterior legs almost black; face rather finely punctured, the punctures about a puncture width apart; on vertex the punctures sparser, antennæ broken, only 12 joints remaining; middle lobe of mesoscutum with the punctures slightly larger than on face, posterior part covered by about six large foveæ; lateral lobes with the punctures slightly smaller and somewhat sparser; scutellum rugoso-punctate, the extreme center smooth, with a few small punctures; wings hyaline, stigma brown, veins light brown; posterior face of propodeum surrounded by a strong carina, the superior face with an elevated medial almost circular carina, the surface laterad of this coarsely rugose; abdomen strongly longitudinally rugose, punctured between the rugæ; apically the rugæ becoming indistinct and the punctures coarser; apex of the abdomen without tubercles, ovipositor short, projecting only slightly beyond apex of abdomen.

One specimen with the Bureau of Entomology, U. S. Department of Agriculture note No. 2610°, the note stating that the specimen came from a twig gall on oak collected at Fort Grant, Arizona, the specimen issuing July 27, 1882,

Type specimen, Cat. No. 18230, U. S. Nat. Mus.

The manuscript name used by Dr. Ashmead is adopted.

***Urosigalphus punctifrons*, new species.**

Male: Length about 4 mm. Black, the coxæ dark brown, legs light reddish, the posterior tibiæ somewhat infuscated, their tarsi darker; face with rather fine punctures less than a puncture width apart, the clypeus smooth except at lateral margins and a very few scattered punctures near upper margin; punctures on the vertex somewhat sparser and larger than on face, those on post-vertex slightly larger; antennæ 15-jointed, middle lobe of mesoscutum at sides and rear coarsely rugoso-punctate; medially shiny, finely punctured and with a single row of coarse punctures along median line; extreme anterior portion finely punctured; lateral lobes with punctures about as on disk of middle lobe; scutellum rugoso-punctate;

mesopleuræ, except medially, rugoso-punctate, middle finely sparsely punctured; abdomen rugoso-punctate, basally the rugæ more or less longitudinal, apically the sculpture becomes simply coarsely punctured, the apex without tubercles.

One specimen from Las Vegas Hot Springs, New Mexico, August 18, H. S. Barber, collector.

Type specimen, Cat. No. 18231, U. S. Nat. Mus.

Urosigalphus bruchivorus, new species.

Female: Length about 2.75 mm. Black, the legs, including coxæ, reddish testaceous, coxæ slightly darker, the hind tibiæ at apices and hind tarsi brown; face rugoso-punctate, more closely so on vertex, post-vertex smooth; antennæ 14-jointed; mesoscutum more coarsely rugoso-punctate, lateral lobes with finer sculpture, their disks finely punctured and shiny; parapsidal furrows obscured by the coarse sculpture; scutellum with coarse punctures, those on the median line finer; propodeum with a median carina, posterior face surrounded by a carina, the median carina prolonged into a short spicule where it meets the carina surrounding the posterior face; mesopleuræ with coarse punctures, along the upper portion of anterior and posterior margins rugoso-punctate; wings subhyaline; abdomen coarsely rugoso-punctate, at extreme base forming a few more or less distinct longitudinal rugæ; tubercles at apex of abdomen small, indistinct; ovipositor not as long as abdomen.

Male: Length 2.5 mm. Similar to the female except in secondary sexual characters; sculpture of the face somewhat finer than in female; elevation of scutellum slightly more prominent.

Described from 10 specimens collected by Mr. Albert Koebele and recorded under his note No. 446°. The note in the Bureau of Entomology covering this number states that this material was bred from *Bruchus* sp. in *Prosopis pubescens* collected at Indio, California, and the specimens are labeled San Diego County, California, but Indio is now in Riverside County.

Type specimen, Cat. No. 18232, U. S. Nat. Mus.

Urosigalphus arizonensis, new species.

Female: Length about 3 mm. Black, the legs ferruginous, the hind tarsi brown; face finely rugoso-punctate, vertex coarsely so; antennal furrows extending to posterior face of head, antennæ 14-jointed; middle lobe of mesoscutum rugose, posteriorly becoming rugoso-punctate; lateral lobes anteriorly finely rugoso-punctate, posterior part with finer distinctly

separated punctures; lateral margins of scutellum with coarse punctures, medial line with a few scattered fine punctures; propodeum with a medial longitudinal carina and the posterior face surrounded by a carina, the median carina produced to a small spicule where it meets the carina of posterior face; mesopleuræ except on disk coarsely punctured; wings subhyaline; abdomen coarsely rugoso-punctate, on basal half forming longitudinal rugæ; ovipositor about as long as abdomen.

Male: Length about 3 mm. Similar to the female except in secondary sexual characters.

Described from two specimens from Fort Yuma, Arizona, reared from *Bruchus arizonensis* by Hubbard and Schwarz with the date 12.4.

Type specimen, Cat. No. 18233, U. S. Nat. Mus.

Urosigalphus neomexicanus, new species.

Female: Length about 2.5 mm. Very dark reddish brown, more apparent on sides, dorsal aspect more blackish; face finely punctured, the punctures about a puncture width apart; clypeus with very few scattered punctures; vertex near eyes more closely punctured, in the antennal furrows almost impunctured, post-vertex impunctate; antennæ 14-jointed; medial lobe of mesoscutum anteriorly finely rugose, the disk shiny, sparsely, finely punctured, the lateral lobes finely, sparsely punctured; scutellum rugoso-punctate; mesopleuræ along edges rugoso-punctate becoming finer and sparser centrad leaving the disk smooth and shiny; wings subhyaline, apical half of radius wanting; narrow posterior face of propodeum surrounded by a carina, obscured laterally by the coarse sculpture, the carina not strongly elevated, dorsal middle carina produced to a small spicule; abdomen coarsely rugoso-punctate, on basal half forming more or less distinct longitudinal rugæ; ovipositor about as long as abdomen; apex of abdomen not tuberculate.

Male: Length about 2.5 mm. Similar to the female except in secondary sexual characters.

Described from two specimens collected by Prof. Cockerell at Las Cruces, New Mexico, the female under Cockerell No. 110, the male under No. 112.

Type specimen, Cat. No. 18234, U. S. Nat. Mus.

The manuscript name used by Dr. Ashmead is adopted.

Urosigalphus femoratus, new species.

Female: Length about 2.25 mm. Black, face with fine punctures

about a puncture width apart, the punctures laterally on the vertex closer and slightly coarser, post-vertex medially impunctate, laterally closely punctured; antennæ 14-jointed, middle lobe of mesoscutum rugose, the lateral lobes shiny, indistinctly punctured; scutellum coarsely rugoso-punctate, mesopleuræ mostly smooth, along the lower and front margins coarsely punctured, posterior margin with a single row of deep pits; propodeum with a narrow posterior face surrounded by a carina which is produced to a small spicule medially above; wings hyaline, radius obsolete for slightly more than apical half of second abscissa; legs reddish brown, coxæ dark brown; abdomen coarsely rugoso-punctate, apex of abdomen with two small tubercles; ovipositor slightly longer than abdomen.

Male: Length about 2.25 mm. Similar to the female except in secondary sexual characters.

Described from two females and one male collected in Illinois by Prof. S. A. Forbes, the type with his No. 17243, the allotype 5048, the paratype female 17235.

Type specimen, Cat. No. 18235, U. S. Nat. Mus.

The manuscript name used by Dr. Ashmead is adopted.

A NEW PANTOPHTHALMUS

(*Diptera, Pantophthalmidæ*)

By FREDERICK KNAB

The family Pantophthalmidæ is better known under the name *Acanthomeridæ*, the change having been made recently in accordance with the rules of priority. The generic name *Pantophthalmus*, which antedates *Acanthomera*, is here used in the restricted sense, as recently defined by Enderlein,¹ the species included having the hind femora unarmed and the face of the female with only a rounded tubercle. To *Acanthomera* are referred those species in which the hind femora bears a thorn before the outer third and the face of the female a stout thorn-like process. I have been unable to reconcile any of the published descriptions with the following species.

Pantophthalmus fastuosus, new species.

Mesonotum dark, with a broad median yellowish gray stripe. Abdomen ferruginous-red in the male, darker in the female. Hind femora

¹Dipterologische Studien, 1, Die Dipteren-Familie Pantophthalmidæ. Zool. Anz., vol. 41, pp. 97-118 (1912).